DOCUMENT RESUME

ED 338 417 PS 020 015

AUTHOR Fenzel, L. Mickey
TITLE A Prospective Study of the Relationships among Role Strain, Self-Esteem, Competence, and Social Support in Early Adolescence.
PUB DATE 18 Apr 91
NOTE 38p.; Paper presented at the Biennial Meeting of the Society for Research in Child Development (Seattle, WA, April 18-20, 1991).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Coping; Daily Living Skills; *Elementary School Students; Grade 5; Intermediate Grades; *Interpersonal Competence; Locus of Control; Middle Schools; *Self Esteem; *Social Support Groups; *Stress Variables; Student Role
IDENTIFIERS *Early Adolescents; Moderator Variables

ABSTRACT

This study examined two models of stress in early adolescence during the transition from elementary to middle school. One model suggested that role strain would predict self-esteem, with perceived competence and social support serving as moderators of strain. The second model predicted that self-esteem, perceived competence, and social support would predict school-related strain. The Middle School Transition Study Questionnaire (MSTSQ) was administered to 116 students at three points in time: the spring term of fifth grade, 3 weeks before the end of the school year; and 3 weeks after the beginning of middle school; and again 5 months later. The MSTSQ is composed of instruments that measure students' perceptions of school-related strains, competence, social support, and self-esteem. Results provided support for both models, suggesting a reciprocal process of influence. Social competence played a moderating role in both models. This result suggests that personal coping resources affect adolescent well-being more than social support does. No gender differences were found. A 56-item reference list is included. (BC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED384417

A Prospective Study of the Relationships among Role Strain, Self-esteem, Competence, and Social Support in Early Adolescence

L. Mickey Fenzel

Loyola College in Maryland

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
L. Mickey Fenzel
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

PS 020015

Running Head: PROSPECTIVE STUDY OF ROLE STRAIN

Paper Presented at the Biennial Meeting of the Society for Research in Child Development, Seattle, WA, April 18, 1991.

BEST COPY AVAILABLE

ABSTRACT

The present prospective study examined two models of the stress process in early adolescence during the transition to middle school. One model suggested that strains would predict self-esteem, controlling for earlier levels, with perceived competence and social support serving as moderators. The second model examined the prediction of school-related strain by self-esteem, perceived competence, and social support. Gender differences in the models were also examined with no main or interaction effects found. Results showed support for both models, suggesting a reciprocal process of influence. The moderating role of social competence in both models, particularly during the early part of the transition, suggests that personal coping resources, more than social support, exert a protective influence on well-being among early adolescents.

A Prospective Study of Role Strain, Self-Esteem, Competence, and Social Support During the Transition to Middle School

In studies of the effects of stress throughout the life span, three principal domains of the stress process have been identified, conceptualized and subjected to increasing scrutiny by theorists and researchers. These domains include sources of stress, outcomes or manifestations of stress, and moderators or buffers of stress. Each domain of this process has been conceptualized in a number of ways in recent years. Studies of sources of stress, for example, have focused on either major life events or everyday stressors, with a decided preference for the former. Similarly, when investigating outcomes of stress, researchers have considered a multitude of psychological, somatic, attitudinal, performance, and behavioral outcomes. Finally, coping resources, coping behaviors, and social support have dominated the work on moderators of the stress process.

Some recent research has challenged this traditional conceptualization of the stress process and has suggested that what have been considered outcomes of stress, for example psychological functioning, may in fact precipitate the perception of events as being stressful. At least two prospective studies, which are lacking in much of the stress research (Compas, Howell, Phares, Williams, & Giunta, 1989), have provided some support for this alternative view (Cohen, Burt, & Bjorck, 1987; Swearingen & Cohen, 1985). Still, much

work is needed, especially with respect to stress in early adolescence and stress in the form of more persistent hassles or strains, rather than discrete life events.

Everyday Role Activities: A Source of Stress

There is a growing body of research that suggests that continuing difficulties in everyday activities, even in the absence of negative life events, can have a significant impact on the psychological well-being of adults, adolescents, and children (Compas, Davis, & Forsythe, 1985; Kanner, Coyne, Schaefer, & Lazarus, 1981; Miller, Wilcox, & Soper, 1985; Rowlinson & Felner, 1988; Siegel & Brown, 1988). With respect to everyday stressors, an area receiving increased attention in recent years involves the difficulties individuals face in ongoing, ordinary formal and informal social roles, such as those of worker, student, or spouse (e.g., Kanner et al., 1981; Pearlin, 1982, 1983). Studies have shown that adults often experience difficulty in the exercise of normal social roles and that persistent felt difficulty, or strain, can have detrimental effects on their physical and psychological well-being (Holt, 1982; Pearlin, 1982, 1983). This research has suggested that sources of role strain may include role ambiguity, role conflict, role overload, and role "underload" (underutilization of resources). During significant life transitions, even normative ones such as the move from one school level to another, roles are often redefined and role strain may

increase as role expectations change (e.g., Benedict, 1938; Compas, Wagner, Slavin, & Vannatta, 1986; Pearlin, Menaghan, Lieberman, & Mullan, 1981).

Children and adolescents, like adults, actively engage in many social roles. Perhaps the most crucial of these roles, especially as one begins junior high or middle school, is that of student. At this school level, early adolescents begin to seek increased control over their school environment as they exhibit a need for increased autonomy (Hill, 1980). At the same time, these students are exposed to an increased work load as well as the expectations and performance evaluations of several teachers (cf., Eccles (Parsons), Midgley, & Adler, 1984).

Performance and behavioral expectations associated with the student role are held by teachers, parents, school administrators and other school personnel, and classmates. To the extent that these expectations conflict with one another or differ from the developing person's capabilities, beliefs, and developmental needs, the young person is expected to experience strain and resulting problematic behavioral and attitudinal outcomes (Fenzel, 1989a; Bronfenbrenner, 1979; Cooper & Ayers-Lopez, 1985; Metz, 1978). Recent research suggests that some students may experience role strain during the first year of junior high or middle school due to role overload or underload, low perceptions of autonomy, and a poor match or "fit" between

students' own role expectations and school demands (Eccles & Midgley, 1989; Eccles (Parsons) et al., 1984; Hirsch & Rapkin, 1987; Simmons & Blyth, 1987).

An Outcome of Strain: Self-Esteem Decline

Among the possible outcomes of continuing role strain and difficult role changes are decrements in individual self-esteem (e.g., Pearlin, 1983; Simmons & Blyth, 1987). Some early adolescent research has shown that the transition to a middle-level school contributes to strain levels and declines in self-esteem due to changes in the school environment (Blyth, Simmons, & Bush, 1978; Blyth, Simmons, & Carlton-Ford, 1983; Crockett, Petersen, Graber, Schulenberg, & Ebata, 1989).

However, if one considers development to be the product of the ongoing interaction of "Person" variables (i.e., stable personal characteristics) and environmental factors (Bronfenbrenner, 1979), then one may find the traditional conceptualization of environmental stressors as a cause of personal distress to be inadequate. The Person side of Bronfenbrenner's ecological framework suggests that personal attributes, attitudes, and dispositions also operate to structure the roles and activities in which one engages, thereby "generating" stress in the environment. This analysis also suggests that strain and psychological resources (e.g., self-esteem) may be reciprocally related (Compas et al., 1986).

Role Strain Moderators

The traditional stress model suggests that not all individuals experience comparable levels of distress when exposed to similar amounts of role strain (Allen & van de Vliert, 1984; Thoits, 1983; Wheaton, 1983). Many theorists and researchers suggest that psychological and environmental resources, also referred to as personal coping resources and social support, tend to moderate the impact of strains on stress outcomes (cf., Wheaton). Moderation is demonstrated, for example, when individuals with sufficient or high quality resources experience relatively low levels of distress when exposed to either low or high levels of strain, but individuals with poor or insufficient resources experience greater distress when strain increases. Moderators, therefore, serve as buffers of the potentially harmful effects of strain.

Personal coping resources. According to Moos and Billings (1982), personal coping resources are best conceptualized as a set of relatively stable personality, attitudinal, and cognitive dispositions that promote effective adaptation, thereby reducing the potentially harmful effects of strain. Individual vulnerability, or the lack of certain personal characteristics, on the other hand, may amplify the effect of strain (Petersen & Spiga, 1982). Personal coping resources that have been shown to reduce the detrimental effects of strain on children and adolescents

include a sense of autonomy, an internal locus of control, and perceived competence or self-efficacy (Compas, 1987; Garmezy, 1983; Harter, 1978; Lawrence, 1986; Pearlin & Schooler, 1978; Wheaton, 1983). Perceived competence was the coping resource variable of choice for the present study because competence judgements have been shown to be predictive of self-esteem among this age group (Bohrnstedt & Felson, 1983; Harter, 1985a). In addition, such a measure provides the opportunity to assess judgements of competence or adequacy in specific school-related domains of particular salience in the lives of early adolescents (i.e., social, academic, and athletic domains).

Social support. Research suggests that receiving support from important others in stressful times or during difficult transitions, or knowing that others are available if needed, provides protection from distress (Beehr, 1985; Cobb, 1976; House, 1981). Though the conceptualization and operationalization of social support differs considerably, researchers generally agree on the importance of emotional, appraisal, informational, and instrumental functions of support from others in times of stress (Beehr; House; Wheaton, 1983). One's perception of the quality of available support, especially emotional support, appears to be more crucial in moderating the effects of strain than the size of one's potential support network (Beehr; Cohen & Wills, 1985). However, some research has failed to show a moderating effect

of social support with either daily hassles or life events among adolescents (cf., Rowlinson & Felner, 1988).

In addition to a moderating effect, it appears that social support can contribute directly to both well-being (Cohen & Wills, 1985; Harter, 1985b; House, 1981) and the experience of stressful events (Compas et al., 1986). It has been suggested that among children and adolescents support in the form of perceived availability of and acceptance by significant others contributes to one's self-worth (Harter, 1985b). Support available to children and adolescents may come from parents, peers and teachers (Harter, 1985b).

Sex Differences

Studies of sex differences in the stress-moderating effects of personal or environmental coping resources on psychological well-being are lacking among child and adolescent samples (Walker & Greene, 1987). This research gap is particularly evident with respect to the effects of chronic stressors, such as everyday hassles or strains.

Siddique and D'Arcy (1984) cast some light on the sex difference issue, having found that adolescent females tended to be more adversely affected than males by family and peer stress and that females with an external locus-of-control were the most distressed group. In their examination of the effects of stressful life events on psychophysiological symptoms among adolescents, Walker and Greene (1987) found a main effect for gender (females reported more symptoms) and a

moderating effect of social support for males but not for females. Caution must be urged, however, when interpreting these findings that used cross-sectional data.

With respect to the impact of stress or strain on various outcomes, research shows an interesting developmental shift. In childhood, boys appear to be more distressed than girls when faced with major life difficulties, such as parental discord or divorce or hospital admission (e.g., Hetherington, Cox, & Cox, 1981; Rutter, 1981). However, in middle adolescence, the trend appears to reverse with females experiencing greater psychological distress than males in times of stress, especially stress involving social relationships (Burke & Weir, 1978; Kessler & McLeod, 1984; Siddique & D'Arcy, 1984). Previous research (Fenzel, 1989b; Fenzel & Blyth, 1986; Hawkins & Berndt, 1985; Hirsch & Rapkin, 1987) suggests that stress vulnerability favors neither sex during early adolescence.

Role Strain Models

The traditional model of the stress process (Allen & van de Vliert, 1984; Pearlin, 1983; Pearlin et al., 1981) suggests that strain will predict changes in self-esteem while perceived personal resources (i.e., competence) and environmental resources (i.e., social support) will positively affect the outcome. Each resource variable and strain are then expected to combine to have an additional moderating effect on these outcomes: students lower in

competence (or support) will be more adversely affected by increased strain than will students higher in competence (or support). Past research, however, suggests that competence is more likely than social support to moderate the effects of strain.

The alternative model tested suggests that, rather than negative experiences affecting psychological outcomes, psychological states (i.e., self-esteem) may predict strain (Cohen et al., 1987; Swearingen & Cohen, 1985). In testing this alternative model, direct and moderator effects of competence and social support will again be investigated.

This two-part investigation may also shed some light on the contention that life events and psychological states may be related reciprocally rather than linearly (Compas et al., 1986). The present study examines this reciprocal process with ongoing role strains, rather than discrete life events, and self-esteem, rather than symptoms, as the indicator of psychological functioning. Sex differences in these two models will also be explored.

METHOD

SUBJECTS

Subjects were part of a 3-wave longitudinal study of the transition from elementary school to middle school in a small city school district in Upstate New York. All fifth-grade students attending two different elementary schools that fed the same 6-8 middle school were recruited for the study. The

final sample included 116 students (51 males and 65 females). These subjects represented 91 percent of students who made the transition from the two elementary schools to the middle school. The mean age of subjects at the time of middle school entrance was 10 years, 10 months. Subjects were predominantly white (90%) with 71 percent reported living with two married parents. Subjects' parents were very well educated with 82 percent of fathers and 72 percent of mothers having at least one college degree. Parent consent was required for participation in the study.

MEASURES

Students were administered the Middle School Transition Study Questionnaire (MSTSQ) in classroom groups of 20 to 30 at three points in time: in Spring of fifth grade, approximately three weeks prior to the end of the school year; three weeks after the beginning of middle school; and again five months later. The MSTSQ was a collection of several instruments that assessed students' perceptions of school-related role strains, competence, social support, self-esteem, anxiety, and the classroom environment. The present study utilized the instruments that assessed perceptions of school-related strains, competence, social support, and self-esteem.

The Early Adolescent School Role Strain Inventory

The Early Adolescent School Role Strain Inventory (EASRSI, Fenzel, 1989a) is a 27-item scale that assesses the

quantity and magnitude of school-related role strains affecting students in elementary and middle school. Factor analyses described elsewhere (Fenzel, 1989a) identified four strain subscales representing demands from a variety of settings and role senders: School Demands (SD, 7 items), Teacher Relations (TR, 5 items), Parent Control (PC, 6 items), and Peer Interaction (PI, 9 items). Statements found on the EASRSI include: "My teachers give too much homework" (SD), "My teachers don't let me know how well I'm doing" (TR), "My parents hassle me about doing my homework" (PC), and "Kids make fun of me if I do well in school" (PI).

When completing the EASRSI, subjects first indicated whether a given statement, which described a potential source of strain, was "True" or "False" for them. If subjects chose "True," they then proceeded to indicate how much the strain bothered them on a 7-point scale from 0 (not bothered at all) to 6 (bothered a lot).

Role strain magnitude was then computed for each subscale and the total scale by summing the magnitude scores for the items subsumed under each subscale or the total scale. In this computation, "False" responses were assigned a value of 0. Subjects endorsed an average of nine strain items and reported a mean strain magnitude of 27.6 for the total scale (a mean of 3.1 per item for those endorsed). Internal reliability (Cronbach alpha) for the total strain magnitude scale was .88). The EASRSI was deemed to possess

high construct and convergent validity, showing significant correlations with self-esteem (r=-.46, p<.001) and trait anxiety (Spielberger, 1970; r=.51, p<.001).

Self-Perception Profile for Children

Harter's Self-Perception Profile for Children (SPPC, 1985a) is a 36-item pencil-and-paper instrument which assesses 5 specific domains of competence as well as global self-worth. Academic, social, and athletic competence, physical appearance, and behavioral conduct subscales each contain 6 items, as does the self-worth scale. Items are scored from 1, indicating a low level of competence or self-worth, to 4, indicating a high level. The SPPC is considered to be appropriate for children and early adolescents in grades 3 through 8 (Harter, 1985a). Consistent with Harter's reports, good internal reliabilities were found for the competence subscales and the self-worth scale (subscale Cronbach alphas ranged from .71 to .85). The three SPPC subscales which assess perceptions of one's sense of mastery or efficacy--academic, social, and athletic competence--were used in the present study.

Social Support Scale for Children

The Social Support Scale for Children (SSSC; Harter, 1985b) assesses the subject's perception of the extent to which significant adults and peers understand, like, care about, and are available to help and listen to them. The SSSC, which uses the same item format as the SPPC described

above, contains 24 items and yields subscale scores for available support from parents, teachers, close friends and classmates. The mean internal reliability of the total support scale for the three administrations in the present study was high (alpha = .89).

Analyses

The two models proposed in the present study were tested using multiple regression analyses consistent with recent stress research that has tested the moderation hypothesis (cf., Cohen, Burt, & Bjorck, 1987; Swearingen & Cohen, 1985). Unlike other analyses, all three predictor variables (competence, social support, and either self-esteem or strain), as well as sex, were entered using a Stepwise procedure (SPSS, 1990), followed by 2-way interaction terms, also in a Stepwise fashion, to test the moderator effects. Because the three competence indicators--academic, social, and athletic competence--have been considered distinct domains (Harter, 1985a), all were entered into the regression equations. However, because the outcome variables of strain and self-esteem are reflective more of social competence than either academic or athletic competence for most children, it was expected that social competence would account for most of the competence variation in criterion measures.

A total of four regression equations were constructed, two for the outcome of self-esteem and two for the outcome of strain magnitude. For each outcome variable, one equation

assessed the stress process from fifth to sixth grade during the early part of the school transition, and one equation assessed the process over a 5-month period during the first middle school year. In each case, the previous value of the outcome variable was entered as a covariate to assess the effects of predictor variables on changes in the outcome measure. In all equations, sex of subject was entered into initial analyses but later removed when no main or interaction effects involving sex were found.

RESULTS

The Prediction of Self-Esteem Change

Means and standard deviations of all variables entered into the regression equations are presented in Table 1. Table 2 outlines the results of multiple regression analyses involving the prediction of self-esteem change during the early and late stages of the transition from fifth to sixth grade.

Insert Tables 1 and 2 about here

Results of the prediction of self-esteem change from fifth grade to early sixth grade (Early Transition) and from early to late sixth grade (Late Transition) provide consistent support for the first proposed model of the stress process. With respect to main effects, prior social competence significantly predicted subsequent self-esteem,

controlling for earlier self-esteem, during Early Transition. During the Late Transition period, early sixth grade strain predicted subsequent self-esteem. A significant moderating effect of social competence on the relationship between strain and self-esteem change was found during both transition periods. Neither academic nor athletic competence added to the prediction of self-esteem as either a main effect or in interaction with strain. In addition, neither gender nor social support added a significant source of variation to the model as a main effect or in interaction with other predictors.

Figure 2 depicts the moderating, or interaction, effect of social competence during early transition. Residual self-esteem from a regression of pretransition self-esteem onto early sixth grade self-esteem was used as the ordinate, with competence and self-esteem groups established from a median split of scores on these variables. This graph shows that students who possessed a high level of competence prior to the transition generally exhibited little change in self-esteem in middle school even in the presence of high fifth-grade strain. Students low in competence, however, were more reactive to strain: the greater the strain, the more likely was sixth-grade self-esteem to be further below expected or predicted levels. (Note that low competence students also tended to possess low levels of self-esteem in fifth grade.)

Insert Figure 2 about here

The Prediction of Changes in School Role Strain

Table 3 summarizes the results of the regression analyses performed to test the second proposed model of the stress process in which role strain is predicted by self-esteem, perceived competence, social support, and gender, controlling for prior strain, during both Early and Late Transition. Partial support for this second model was also found. During Early Transition, social competence predicted role strain change directly and in interaction with self-esteem. In the prediction of Late Transition strain change, where early sixth-grade strain accounted for 68 percent of the variance in Late Transition strain, only social support added any additional significant source of variation in the dependent measure. No interaction effects were observed in this latter equation. (For the interaction of self-esteem and social competence, F (3,112) = 2.70, p = .103.) It should be pointed out that, because of the hierarchical nature of multiple regression analyses, self-esteem was shown to be a significant predictor of Early Transition strain change, F (2,113) = 6.64, p = .011, though it does not appear in the results because of the relatively stronger influence of social competence. As with the test of the first model, no effect for gender was found.

Insert Table 3 about here

DISCUSSION

The present study was undertaken to investigate the relationships among school role strain, self-esteem, perceived competence (social, academic, and athletic) and social support during early adolescence using prospective analyses. Two models of the relationships among these variables were tested during two time intervals: (1) the early period of transition between elementary and middle school and (2) the first 5 months of middle school. The first model predicted self-esteem and the second one strain, controlling for earlier levels of each outcome variable. Complex links among the variables investigated were found that showed, among other things, a reciprocal relationship between self-esteem and strain over time. There were no sex differences in these relationships.

With respect to the prediction of self-esteem change, an interaction effect of strain and social competence was found during both time intervals. This interaction illustrates the moderating effect of social competence on the impact of strain on self-esteem. Students high in social competence maintained high levels of self-esteem regardless of strain levels, whereas low competence students demonstrated a negative relationship between prior strain levels and self-

esteem change. This moderating effect illustrates how the effect of ongoing role strains on self-esteem depends on the quality of one's personal coping resources. For high-competence individuals, the stress associated with the transition may be viewed as a challenge they felt competent enough to master.

Though the presence of the moderating effect for both prospective analyses may suggest that the main effects have little interpretive significance, the differences in these main effects merit some comment. During early transition in which a change of schools occurred, social competence--a personal coping resource--predicted the change in self-esteem. During sixth grade, however, the perception of the stressfulness of the environment predicted subsequent self-esteem. These findings suggest the importance of helping students in elementary school develop personal coping resources that will help ward off any potentially damaging effects of a new school environment.

Results showed no main or interaction effects involving social support or gender as predictors of self-esteem change. Finding no support for the moderating effect of social support was consistent with recent research (Rowlinson & Felner, 1988). With respect to gender, the present study suggests that self-esteem changes come about in similar ways for male and female early adolescents. Though gender differences in adolescent stress studies that have used

psychological criterion measures have been found (e.g., Walker & Greene, 1987), such studies have not used prospective analyses.

The dominant role of social competence over other competence domains (academic and athletic) as a moderator of strain is noteworthy. Since early adolescence is a time when young people begin to develop egalitarian relationships with peers and to share more intimately with peers (Berndt, 1982; Youniss, 1980), it is easy to see that the ability to make and sustain such friendships would tend to lessen the impact of strain on the self-system. Academic and athletic competence, which tap specific performance domains of competence that are not crucial to all early adolescents, would not be expected serve as a mechanism to ward off the effects of strain to the extent that social competence would.

The Prediction of Change in Strain. The second model tested hypothesized that, rather than strains impacting self-esteem, self-esteem (together with competence and social support) would affect changes in the experience of strain. An investigation of this alternative model revealed that Pretransition social competence levels significantly predicted school-related strain during Early Transition (a negative correlation), and interacted with self-esteem to predict additional variation in strain. These results provide additional evidence of the value of viewing oneself as socially competent prior to a change in schools. During

the months following the initial transition, however, neither self-esteem nor social competence affected strain directly or interactively. Rather, social support exerted a small but significant influence on strain, and prior strain accounted for 68 percent of the variation in the dependent measure.

The interaction effect found during the transition shows that, whereas lower self-esteem is related to increased strain for low-competence students, high competence students maintain low strain levels regardless of self-esteem levels. It appears that perceiving oneself to be high in social competence provides a protective function for those low in self-esteem. Once established in the new school environment, however, early adolescents' perception of the stressfulness of school is not affected by self-esteem or competence. It is understandable that, once acquainted with new teachers and peers, feeling supported by these new role senders and parents exerts a strong impact on how much more or less straining students perceive the environment.

A Comparison of the Models

A comparison of the results of the two models tested suggests, consistent with the work of Swearingen and Cohen (1985) and Compas et al. (1986), that a reciprocal process relating strain and psychological functioning operates in early adolescence. The prospective nature of the present study, puts some teeth into such a suggestion at which previous cross-sectional investigations could only hint.

Perhaps Bronfenbrenner (1979) best conceptualized the reciprocal processes by which such variables as strain, self-esteem, perceived competence, and social support affect one another in his ecological theory of human development. This theory stresses the powerful mutual impact of relatively stable characteristics of the developing person and the changing nature of the environment, particularly during a transition. He recognized that even as the changing environment affects psychological functioning, aspects of the person tend to affect the perception of the environment as distressing or challenging. In addition, the statistical interactions evidenced in the present study demonstrate how aspects of the environment (i.e., strain and social support) and the person (predominantly self-esteem and competence) operate together to affect psychological functioning and the perceptions of stress in the environment.

The greater salience of social competence over social support as a moderator in both models suggests that having the ability to make and sustain friendships is a more powerful asset than the availablility of social support, though both variables contribute to self-esteem (cf., Harter, 1978, 1985a). Reasons for this finding may be related to characteristics of early adolescents and the nature of the effect of strains on the self-esteem (Pearlin, 1983).

With respect to the subjects themselves, early adolescents may lack the understanding of how to utilize

social support to help alleviate strain due to ongoing stress in school, especially when much of the strain is related to difficulties presented by teachers and parents, who provide much of the support. Because these young people are just beginning to learn how to effectively utilize peers to receive and provide social support (Berndt, 1982; Youniss, 1980), their competence perceptions, internalized from years of social comparison opportunities in school, may be more effective moderators of strain.

The nature of ongoing strain, in contrast to discrete life events, may render competence (a personal resource) more effective than social support (an environmental resource) in warding off the effects of strain on the self system. Since strain is more likely than life events to be under the control of the individual, those who perceive that they can exert control (i.e., high competence individuals) are not as likely to feel victimized by strain.

Study Limitations and Future Directions

By presenting evidence of the reciprocal influences of role strain and self-esteem on each other prospectively during a significant life transition, the present study makes a significant contribution to the understanding of the nature of the stress process during early adolescence, particularly the process that involves ongoing strains. However, despite the strengths of the study, some limitations need to be addressed. For example, the moderators used in the analyses

involving self-esteem, namely social support and perceived social competence, appear likely to tap similar, though certainly not identical, characteristics of early adolescents for whom successful peer relationships are important (cf., Berndt, 1982). Perhaps an alternative competence or mastery indicator, such as locus of control, could provide more information about the processes examined. It must be recognized too that strain has been narrowly defined in the present study to include only strains associated with the role of student, though multiple sources of such strain are considered. Future research efforts might investigate additional types of chronic strain.

Though the present study examines two models of the stress process involving ongoing role strains among early adolescents, other models may exist the could provide additional insight into this process. One such possibility might consider competence or social support as both contributors to and products of stress. For example, Bohrnstedt and Felson (1983) suggested that perceptions of popularity and self-esteem may have reciprocal effects and Compas et al. (1986) found evidence linking stressful events, social support, and psychological symptoms reciprocally.

Results of this study must be viewed with the understanding that data was collected using self-report questionnaires, a procedure that may not fully capture the processes at work in the lives of subjects (cf., Rowlinson &

Felner, 1988). In addition, because subjects in the present study were predominately middle-class white children of well-educated parents, the results may not generalize to communities with a different socio-economic mix or where the transition is more stressful. With the cultural characteristics of our society changing as they are, future research efforts might address the questions investigated herein with nonwhite samples in both urban and rural settings. In addition, the use of control groups and more than one ethnic or social group within a given school community should enhance our understanding of the effects of school transitions on early adolescents.

Longitudinal studies of several years duration would be useful to better understand the processes underlying the relationships among the variables examined in the present study on the one hand and subsequent psychological, behavioral, and performance outcomes of middle adolescence. An understanding of the kinds of factors that contribute to low self-esteem and role strain in middle school may provide a key to understanding the roots of problematic behavior in adolescence.

References

Allen, V. L., & van de Vliert, E. (1984). A role theoretical perspective on transitional processes. In V. L. Allen & E. van de Vliert (Eds.), Role transitions: Explorations and explanations (pp. 3-18). New York: Plenum.

Beehr, T. A. (1985). The role of social support in coping with organizational stress. In T. A. Beehr & R. S. Bhagat (Eds.), Human stress and cognition in organizations: An integrated perspective (pp. 375-398). New York: John Wiley & Sons.

Benedict, R. (1938). Continuities and discontinuities in cultural conditioning. Psychiatry, 1, 161-167.

Berndt, T. J. (1982). The features and effects of friendships in early adolescence. Child Development, 53, 1447-1460.

Blyth, D. A., Simmons, R. G., & Bush, D. (1978). The transition into early adolescence: A longitudinal comparison of youth in two educational contexts. Sociology of Education, 51, 149-162.

Blyth, D. A., Simmons, R. G., & Carlton-Ford, S. (1983). The adjustments of early adolescents to school transitions. Journal of Early Adolescence, 3, 105-120.

Bohrnstedt, G. W., & Felson, R. B. (1983). Explaining the relations among children's actual and perceived performances and self-esteem: A comparison of several causal models. Journal of Personality and Social Psychology, 45, 43-56.

Bronfenbrenner, U. (1979). The ecology of human development: Experiments by nature and design. Cambridge, MA: Harvard University Press.

Burke, R. J., & Weir, T. (1978). Sex differences in adolescent life stress, social support and well-being. Journal of Psychology, 98, 277-288.

Cohen, L. H., Burt, C. E., & Bjorck, J. P. (1987). Life stress and adjustment: Effects of life events experienced by young adolescents and their parents. Developmental Psychology, 23, 583-592.

Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. Psychological Bulletin, 98, 310-357.

Cobb, S. (1976). Social support as a moderator of life stress. Psychosomatic Medicine, 38, 300-314.

Compas, B. E. (1987). Coping with stress in childhood and adolescence. Psychological Bulletin, 101, 393-403.

Compas, B. E., Davis, G. E., & Forsythe, C. J. (1985). Characteristics of life events during adolescence. American Journal of Community Psychology, 13, 677-691.

Compas, B. E., Howell, D. C., Phares, V., & Williams, R. A. (1989). Risk factors for emotional/behavioral problems in young adolescents: A prospective analysis of adolescent and parental stress and symptoms. Journal of Consulting and Clinical Psychology, 57, 732-740.

Compas, B. E., Wagner, B. M., Slavin, L. A., & Vannatta, K. (1986). A prospective study of life events, social support, and psychological symptomatology during the transition from high school to college. American Journal of Community Psychology, 14, 241-257.

Cooper, C. R., & Ayers-Lopez, S. (1985). Family and peer systems in early adolescence: New models of the role of relationships in development. Journal of Early Adolescence, 5, 9-21.

Crockett, L. J., Petersen, A. C., Graber, J. A., Schulenberg, J. E., & Ebata, A. (1989). School transitions and adjustment during early adolescence. Journal of Early Adolescence, 9, 181-210.

Eccles J. S., & Midgley, C. (1989). Stage environment fit: Developmentally appropriate classrooms for young adolescents. In R. E. Ames & C. Ames (Eds.), Research in motivation in education (Vol. 3, pp. 139-186). New York: Academic Press.

Eccles (Parsons), J., Midgley, C., & Adler, T. F. (1984). Grade-related changes in the school environment: Effects on achievement motivation. In J. Nicholls & M. L. Maehr (Eds.), Advances in motivation and achievement (Vol. 3, pp. 283-331). Greenwich, CT: JAI Press.

Fenzel, L. M. (1989a). Role strain in early adolescence: A model for investigating school transition stress. Journal of Early Adolescence, 9, 13-33.

Fenzel, L. M. (1989b). Role strains and the transition to middle school: Longitudinal trends and sex differences. Journal of Early Adolescence, 9, 211-226.

Fenzel, L. M., & Blyth, D. A. (1986). Individual adjustment to school transitions: An exploration of the role of supportive peer relations. Journal of Early Adolescence, 6, 315-329.

Garmezy, N. (1983). Stressors of childhood. In N. Garmezy & M. Rutter (Eds.), Stress, coping, and development in children (pp. 43-84). New York: McGraw-Hill.

Harter, S. (1978). Effectance motivation reconsidered: Toward a developmental model. Human Development, 21, 34-64.

Harter, S. (1985a). Manual for the Self-Perception Profile for Children (Unpublished manuscript). Boulder, CO: University of Denver.

Harter, S. (1985b). Manual for the Social Support Scale for Children (Unpublished manuscript). Boulder, CO: University of Denver.

Hawkins, J. A., & Berndt, T. J. (1985). Adjustment following the transition to junior high school. In G. R. Adams (Chair), School transitions: Positive and negative associations for social, emotional, and academic development. Symposium presented at the Biennial Meeting of the Society for Research in Child Development, Toronto, Canada.

Hetherington, E. M., Cox, M, & Cox, R. (1981). Effects of divorce on parents and children. In M. Lamb (Ed.), Nontraditional Families (pp. 223-288). Hillsdale, NJ: Erlbaum.

Hill, J. P. (1980). Understanding early adolescence: A framework. Carboro, NC: Center for Early Adolescence.

Hirsch, B. J., & Rapkin, B. D. (1987). The transition to junior high school: A longitudinal study of self-esteem, psychological symptomatology, school life, and social support. Child Development, 58, 1235-1243.

Holt, R. R. (1982). Occupational stress. In L. Goldberger & S. Breznitz (Eds.), Handbook of stress: Theoretical and clinical aspects (pp. 419-444). New York: Free Press.

House, J. S. (1981). Work stress and social support. Reading, MA: Addison-Wesley.

Kanner, A. D., Coyne, J. C., Schaefer, C., & Lazarus, R. S. (1981). Comparison of two modes of stress management: Daily hassles and uplifts versus major life events. Journal of Behavioral Medicine, 4, 1-39.

Kessler, R. C., & McLeod, J. D. (1984). Sex differences in vulnerability to undesirable life events. American Sociological Review, 49, 620-631.

Lawrence, D. B. (1986). Life stress and adaptive functioning during the transition from childhood to adolescence. Unpublished doctoral dissertation. Western Reserve University.

Metz, M. H. (1978). Classrooms and corridors: The crisis of authority in desegregated secondary schools. Berkeley: University of California Press.

Miller, M. J., Wilcox, C. T., & Soper, B. (1985, November). Measuring hassles and uplifts among adolescents: A different approach to the study of stress. The School Counselor, 107-110.

Moos, R. H., & Billings, A. G. (1982). Conceptualizing and measuring coping resources and processes. In L. Goldberger & S. Breznitz (Eds.), Handbook of stress: Theoretical and clinical aspects (pp. 212-230). New York: Free Press.

Pearlin, L. I. (1982). The social contexts of stress. In L. Goldberger & S. Breznitz (Eds.), Handbook of stress: Theoretical and clinical aspects (pp. 367-397). New York: Free Press.

Pearlin, L. I. (1983). Role strains and personal stress. In H. B. Kaplan (Ed.), Psychosocial stress (pp. 3-32). New York: Academic Press.

Pearlin, L. I., Menaghan, E. G., Lieberman, M. A., & Mullan, J. T. (1981). The stress process. Journal of Health and Social Behavior, 22, 337-356.

Pearlin, L. I., & Schooler, C. (1978). The structure of coping. Journal of Health and Social Behavior, 19, 2-21.

Petersen, A. C., & Spiga, R. (1982). Adolescence and stress. In L. Goldberger & S. Breznitz (Eds.), Handbook of stress: Theoretical and clinical aspects (pp. 515-528). New York: Free Press.

Rutter, M. (1981). Stress, coping, and development: Some issues and some questions. Journal of Child Psychiatry and Psychology, 22, 323-356.

Rowlinson, R. T., & Felner, R. D. (1988). Major life events, hassles, and adaptation in adolescence: Confounding in the conceptualization and measurement of life stress and adjustment revisited. Journal of Personality and Social Psychology, 55, 432-444.

Siddique, C. M., & D'Arcy, C. (1984). Adolescence, stress, and psychological well-being. Journal of Youth and Adolescence, 13, 459-473.

Siegel, J. M., & Brown, J. D. (1988). A prospective study of stressful circumstances, illness symptoms, and depressed mood among adolescents. Developmental Psychology, 24, 715-721.

Simmons, R. G., & Blyth, D. A. (1987). Moving into adolescence: The impact of pubertal change and school context. New York: Aldine.

Spielberger, C. D. (1970). How-I-Feel questionnaire, STAIC Form C-2. Palo Alto, CA: Consulting Psychologists Press.

SPSS, Inc. (1990). SPSS Reference Guide. Chicago: Author.

Swearingen, E. M., & Cohen, L. H. (1985). Life events and psychological distress: A prospective study of young adolescents. Developmental Psychology, 21, 1045-1054.

Thoits, P. A. (1983). Dimensions of life events that influence psychological distress: An evaluation and synthesis of the literature. In H. B. Kaplan (Ed.), Psychosocial stress (pp. 33-103). New York: Academic Stress.

Walker, L. S., & Greene, J. W. (1987). Negative life events, psychosocial resources, and psychophysiological symptoms in adolescents. Journal of Clinical Child Psychology, 16, 29-36.

Wheaton, B. (1983). Stress, personal coping resources, and psychiatric symptoms: An investigation of interactive models. Journal of Health and Social Behavior, 24, 208-229.

Youniss, J. (1980). Parents and peers in social development: A Sullivan-Piaget perspective. Chicago: Chicago University Press.

Table 1.

Means and Standard Deviations of Variables Used in Multiple Regression Analyses (N = 116)

	Fifth Grade	Early Sixth Grade	Later Sixth Grade
Self-Esteem	19.4	20.1	20.3
	(3.9)	(4.1)	(5.1)
Strain Magnitude	29.2	26.5	27.0
	(8.8)	(8.6)	(8.5)
Social Competence	17.0	18.3	
	(4.2)	(4.4)	
Academic Competence	18.4	19.0	
	(3.4)	(3.6)	
Athletic Competence	16.8	17.6	
	(4.3)	(4.6)	
Social Support	77.7	79.8	
	(12.6)	(11.4)	

Table 2.

Results of Multiple Regression Analyses of the Effects of Strain, Perceived Competence, and Social Support on Self-Esteem during Fifth and Sixth Grade (N=116)

Variable	r	Increase in R^2	F	p
Prediction of Early Transition Self-Esteem:				
PT* Self-Esteem	.69	.48	106.19	< .001
PT Social Competence	.49	.02	4.64	.033
Strain x Social Competence	.43	.07	17.23	< .001
Prediction of Late Transition Self-Esteem:				
ET+ Self-Esteem	.66	.43	86.28	< .001
ET Strain	-.52	.04	8.02	.006
Strain x Social Competence	.31	.03	7.25	.008

* Pretransition + Early Transition

Table 3.

Results of Multiple Regression Analyses of the Effects of Self-Esteem, Perceived Competence, and Social Support on Changes in Role Strain during Fifth and Sixth Grade (N=116)

Variable	r	Increase in R^2	F	p
Prediction of Early Transition Role Strain:				
PT* Role Strain	.63	.40	76.90	< .001
PT Social Competence	-.48	.06	12.29	.001
Self-Esteem x Social Competence	-.30	.03	6.74	.011
Prediction of Late Transition Role Strain:				
ET+ Role Strain	.82	.68	237.64	< .001
ET Social Support	-.56	.02	5.69	.019

* Pretransition + Early Transition

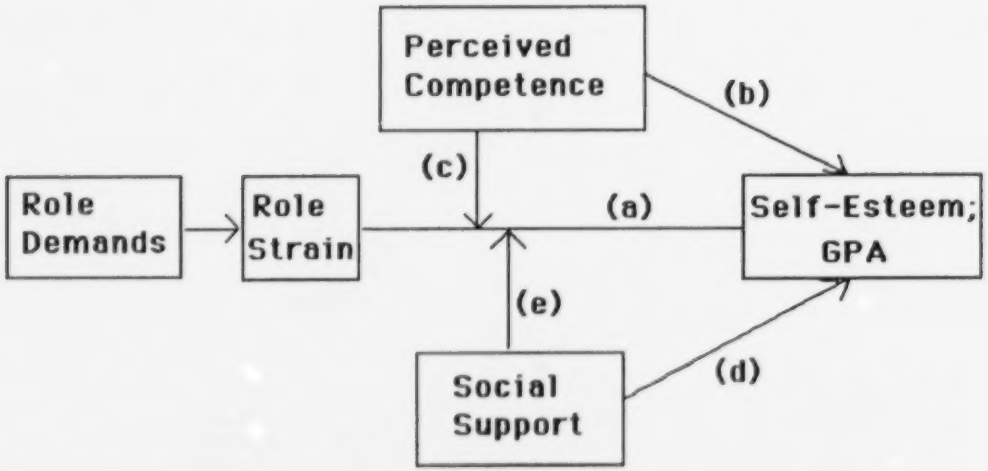

Figure 1. Role Strain Moderation Model: (a) direct negative effect of strain on outcomes; (b) direct positive effect of competence on outcomes; (c) moderating effect of competence on the relationship between strain and outcomes; (d) direct positive effect of social support on outcomes; and (e) moderating effect of social support on the relationship between strain and outcomes.

Figure 2. Relationship of School Strain Magnitude and Self-Esteem Change for Low and High Competence Subjects